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ABSTRACT

Discussion of the use of language aptitude tests for United States government workers looks at the learner types they must assess and contexts in which a newly-learned language will be used. In general, employees selected for language learning are either current employees already productively engaged in second language use or new hires with excellent academic records in commonly taught languages. Training focus is primarily on speaking, non-interactive listening, and reading, targeting a minimum proficiency level of 2. For less commonly taught languages, however, there are few measures to predict success beyond this level. Skills required for speech and writing are linked to different social dynamics characterizing each. The complex relationship of these two channels of delivering language has important implications for aptitude testing. Distance between the learner's existing second language is also a critical factor in language aptitude and training; a new technique for measuring third language difficulty is now available. There are complex relationships between the backgrounds and attainments of prospective language learners and frames of reference in which they will be expected to operate. A variety of instruments is needed, some of which will demand much more testing time and may discomfit personnel preferring quick testing. (MSE)

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APTITUDE TESTS: CONCEPTION AND DESIGN

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U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

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Language Aptitude Testing: Language Learners and Language Applications

Language Learning: Available populations

Language learners come in the main from two quarters within US government agencies: the onboard cadre and prospective hires. The problems and promise of each are considered below, with English understood as the first language of most prospective examinees.

Onboard working linguists

Of the onboard force those persons already productively engaged in second language work are, if they can be spared, the best bets for cross-training. Of these persons it can be safely said that certain ones are better candidates for the "most difficult" languages, while others may be retrained in those third languages which are at "medium" distance from the ones they are currently working. In either case, the productive linguist may have credentials equal to those that present "aptitude" measures (MLAT, DLAB, et al) can confer.

Prospective linguists

For present purposes these are by and large new hires who have excellent academic records in western European languages, but are scheduled for retraining in "middle" or "remote" languages. They are supplemented on occasion by a small number of onboard non-linguists who for some reason need to have the "elements" of one such language. Such persons should be tested for aptitude so that managers have at least some idea of the odds of success.

Language uses: skills and levels

Of the four skills described in the present version of the ILR guidelines, only three come into play with any frequency: speaking, non-interactive listening and reading. As for levels, these are best determined by the kinds of texts the language learners

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can be expected to comprehend and/or produce in the three mentioned skills. For most purposes full-range level 2 attainments in one or more of the three are absolute minimums.

While there is value in using aptitude measures with persons scheduled o study difficult languages there seem to be no tests specifically designed to predict success beyond level 2. It is at level 3 (or perhaps 2+) that major cultural differences between languages begin to cause difficulties for learners in various semantic areas. The fact is, however, that most prospective learners need to develop skills within the range of level 3 and (ideally at 3+ or 4) if the Government is to get its money's worth from training. Whether aptitude measures already exist in some form, or can be developed to address this question is uncertain. Other kinds of cultural-sensitivity models are available and may be the best vehicles for the purpose.

Language channels: speech vs. writing systems

Channels for present purposes are those means by which language can be delivered, i.e., through speech or writing. The skills required for the respective channels are tied in large measure to the differing social dynamics characterizing each.

Speech

Speech can be viewed for any language as the starting point of the whole of communication. It is usually in the form of an exchange in which initiation, response and rejoinder occur without elaborate planning. Viewed in this way, language use becomes an arena of action in which rapid shifts from production to reception and back are the norm for communication and a kind of standard for language learners. That is, the language learners for whom the "speech" channel will be central to their experience should be psychologically as well as linguistically prepared for conversational give-and-take. Naturally, a complex of skill entailing speech production and aural comprehension (in ILR terms, Speaking and Interactive Listening) will enter into whatever kind of aptitude test is developed.

It is not true, however, that speech invariably requires both production and reception skills. There are situations in everyday life where speaking does not assume an oral response: persons listening to radio and television broadcasts, or to lectures in an auditorium, are in on position to respond immediately to what they are hearing (although there may be opportunities later to call into the station with comments or put questions to a speaker at the end of a presentation). Even in these cases,

though, processing of speech in a delayed response mode still requires the skills associated with the conversion of sound to meaning, supported, to be sure, by tape replay when this is possible or feasible. Memory is in any case an essential in capturing meaning from the flow of sound through time. In situations where language performance rather than general proficiency is demanded aptitude testing of a highly specialized nature may be required. Specialized aptitude instruments of this sort are rare commodities.

Writing systems

Writing systems are of relatively recent origin and naturally derivative, although they can rapidly take on lives to some degree independent of the spoken language on which they are based. Thus, in many instances alphabets and scripts may not track with the phonology of the spoken language because they have been frozen for decades or centuries while the spoken language evolves rather rapidly. As for "character sets" associated with languages such as Chinese or ancient Egyptian, there is little or no phonic/graphic linkage. However, one factor characterizes written as opposed to spoken texts: space rather than time permits easier accessibility to processing information. Current aptitude models by and large build on that fact.

Reading/speaking crossover

The complex relationships of the two skills has important implications for aptitude testing. Language strings in written form can be described as "flowing through space" rather than time, which allows the reader easier access to preceding and following material noted above than is the case with speech. Offsetting the advantage thus conferred, however, are problems inherent in the sometimes tenuous relation between the phonology of the spoken and written systems alluded to above. Questions of grammar and syntax enter the picture, too, but they are not simply concerned with delivery channels: language in spoken form may actually have its source in a written text, and conversational materials is sometimes reduced to written form, to be read later. The challenges to comprehension of mixed modes of delivery thus entail at some point the requirement to surmount the difficulties of the flow of spoken language in internalizing, and often making a record of the processed material in answer to whatever style and register the text is couched.

Clearly an aptitude test which contains word-through clause-level material at most will not get at anything more than the phono-morphological structure (i.e. the

"canonic forms") of an artificial language in which the rules of speech are detailed in the exercise. In the case of a natural language, an extended period of familiarization with that language would be needed to test even the simplest of utterances; this is a luxury normally not available for aptitude measures. It might be possible to devise an aptitude model in which the grammar and lexicon of a given written language are detailed but which requires the examinee to recover somewhat variant forms and junctures typical of speech.

Distance between languages

The retraining of linguists in other languages was raised above in connection with the needs of the work force. The critical question here, however, is the distance between whatever language skills the learner has already mastered (including skill levels in the native language) and those skills needed in acquiring a new language or languages. For example, a linguist either newly hired or on board for some time has a good reading knowledge of Chinese. However, local need requires reading skill in Japanese; the character set the learner already controls from Chinese can be most serviceable for the latter language. Managers can use information of this kind in planning retraining and can likewise make use of the studies on language distance now or prospectively employed by the Government language schools. Time does not permit extended commentary on distances between languages but a few observations may suffice, based on an approach to language "difficulty" under consideration for government-wide use.

The system currently in place for dealing with language "difficulty"—in practical terms, the problems native speakers of English have in mastering other languages—provides for four categories, from "easiest" to "hardest"— without greater detail. There is now available a matrix which attempts to identify just what is difficult for an American student of a second (or third) language. The matrix lists in a vertical column critical language elements, i.e., phonic and graphic systems (Block A); grammatical systems (Block B); and semantic/cultural systems (Block C). The horizontal axis specifies presumed distances from English: 1–Near; 2–Middle; 3–Remote. The resulting nine cells contain explanatory material relevant to each cell as it applies (tentatively) to one aspect of some 115 languages. Thus, Japanese may be summed up alphanumerically as A3, B3, C3: a language whose systems of writing, grammar and conceptualization are all (relatively) remote from English. Chinese, on the other hand, while sharing with Japanese the complexities of the writing system, is not as remote in regard to its grammatical and (possibly) its semantic system. Thus, it could be represented as A3, B2, C2.

This study is in its preliminary stages, and many changes will be forthcoming. As a beginning, though, it deserves consideration in the framework of language aptitude theorizing. A copy of this matrix is available on request.

Summary

From the above it should be clear that there are complex relationships between the backgrounds and attainments of prospective second (or third) language learners and the frames of reference in which those learners may be expected to operate. Thus the notion of "language aptitude" is to be considered in light of the level of linguistic and cultural skill required of or desired by the learner; the channel (speech, writing) in which the learner is more comfortable; and his or her need on occasion to deal with both channels in (roughly) the same time frame. Clearly a variety of instruments is needed some of which will demand much more testing time than those currently in use and will discomfit supervisory and other personnel who prefer short and snappy tests.